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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/835,452	04/16/2001	Ehud Levy	40654/257276	5987

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JOHN S. PRATT, ESQ
KILPATRICK STOCKTON, LLP
1100 PEACHTREE STREET
SUITE 2800
ATLANTA, GA 30309

EXAMINER

BARRY, CHESTER T

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 10/03/2002

3

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/835,452

Applicant(s) *AF 3*

LEVY ET AL.

Examiner

Chester T. Barry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) 1-28 and 44 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 29-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☒ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☒ Other: *copy of claims pages 17-20*.

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Claim renumbering: Claims filed as claims "27," "29," "31" - "48" have been renumbered by the Office as 25 - 44 per 37 CFR 1.126. Please note that the claim numbers from which these renumbered claims depend have not been amended insofar as the rules do not permit it. Applicants and their attorneys are encouraged to review more carefully the numbering of claims.

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1 - 28, 44, drawn to a method of making granulated powder, classified in class 75, subclass 246.
- II. Claims 29-43, drawn to a granulated powder, classified in class 210, subclass 749.

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. Moreover, because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

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During a telephone conversation with Bruce Gray on or about 9/25/02 a provisional election was made with traverse to prosecute the invention of Group II, claims 29-43. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1 – 28, 44 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Observation: Two of the three co-applicants signed the declaration for patent application on April 4, 2001. One co-applicant signed the declaration on April 10, 2001. The 21 pages of the specification numbered 1 – 21 filed on April 16, 2001, include the fax transmission header notations indicated below:

Specification Page no.	Fax header notation			
1	04/10/2001	12:59	FAX	☐002
2	04/10/2001	12:59	FAX	☐003
3	04/10/2001	13:00	FAX	☐004
4	04/10/2001	13:00	FAX	☐005
5	04/10/2001	13:01	FAX	☐006
6	04/10/2001	13:01	FAX	☐007
7	04/10/2001	13:01	FAX	☐008
8	04/10/2001	13:02	FAX	☐009
9	04/10/2001	13:02	FAX	☐010
10	04/10/2001	13:03	FAX	☐011
11	04/10/2001	13:03	FAX	☐012
12	04/10/2001	13:03	FAX	☐013
13	04/10/2001	13:04	FAX	☐014
14	04/10/2001	13:04	FAX	☐015
15 →	04/12/2001	08:57	FAX	☐002
16	04/10/2001	13:05	FAX	☐017
17	04/10/2001	13:05	FAX	☐018
18	04/10/2001	13:05	FAX	☐019
19	04/10/2001	13:06	FAX	☐020
20	04/10/2001	13:06	FAX	☐021
21	04/10/2001	13:06	FAX	☐022

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No objections based on this observation, namely, that the copy of page 15 which ultimately was filed with the PTO on April 16, 2001, was faxed two days after all three co-applicants executed the declaration for patent application.

Claims 30 and 32, each claim a dependent claim containing a reference to claim 33 [sic], are **rejected** under 35 U.S.C. §112(4) for failing to contain a reference to a "previously" set forth claim.

Similarly, Claim 31, a dependent claim containing a reference to claim 34 [sic], is **rejected** under 35 U.S.C. §112(4) for failing to contain a reference to a "previously" set forth claim.

Similarly, Claims 33 and 34, each claim a dependent claim containing a reference to claim 35 [sic], are **rejected** under 35 U.S.C. §112(4) for failing to contain a reference to a "previously" set forth claim.

Similarly, Claim 36, a dependent claim containing a reference to claim 39 [sic], is **rejected** under 35 U.S.C. §112(4) for failing to contain a reference to a "previously" set forth claim.

Similarly, Claims 37 - 39, each claim a dependent claim containing a reference to claim 40 [sic], are **rejected** under 35 U.S.C. §112(4) for failing to contain a reference to a "previously" set forth claim.

Similarly, Claim 40, a dependent claim containing a reference to claim 43 [sic], is **rejected** under 35 U.S.C. §112(4) for failing to contain a reference to a "previously" set forth claim.

Similarly, Claims 42 and 43, each a dependent claim containing a reference to claim 45 [sic], are **rejected** under 35 U.S.C. §112(4) for failing to contain a reference to a "previously" set forth claim.

Claims 30 - 35 are rejected under 35 U.S.C. Sec. 112, 2nd parag., for failing to particularly point out and distinctly claim the subject matter for which patent protection is sought.

Through dependency, Claim 30 incorporates the limitations of claims 33 and 35. Each of claims 33 and 34 incorporates the limitations of claim 35. While claims 30, 31, 32, 33, and 34 are directed to granulated powders, the independent claim 35 on which each of cl. 30, 31, 32, 33, and 34 depends directly or indirectly covers a method for reducing the level of contaminants in a fluid – not a granulated powder. Claim 35 is rejected for circular reference back to itself through claim 33. The same can be said for claims 31 and 32 which depend directly or indirectly on claim 35. No meaningful prior art search of claims 30 - 35 could be conducted in view of this not-insignificant degree of claim scope imprecision.

Claims 36, 37, 38, 39, 40, 41, 42, and 43 are rejected under 35 U.S.C. Sec. 112, 2nd parag., for failing to particularly point out and distinctly claim the subject matter for which patent protection is sought. Each of these claims is dependent directly or indirectly on claim "45." Claim 45 does not exist in this application. Accordingly, no

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meaningful search of these claims could be conducted without knowing the limitations of claim 45 on which each of these claims depend:

Claim 29 is rejected under 35 U.S.C. Sec. 112, 2nd parag., for failing to particularly point out and distinctly claim the subject matter for which patent protection is sought. Claim 29 recites a material having a "low . . . melting index." No meaningful standard for characterizing a given melting index as "low" has been provided in the specification. That is, the claim fails to provide the public with adequate notice of the proscribed property subject matter.

Claim 29 is rejected under 35 U.S.C. Sec. 103(a) over USP 6270609 to Markell.

Claim 29 is directed to a granulated powder comprising inorganic particles having an average size ranging from about 20 nm [20×10^{-9} m or 0.02 μm or 200 Å] to about 200 μm [200×10^{-6} m or 0.2 mm] in an amount ranging from about 1wt% to about 75wt% agglomerated with a low or zero melting index high-density polyethylene binder.

USP 6270609 to Markell describes a blend of particulate silica gel (col 4 line 52) as small as 100 μm (col 4 line 53) and a thermoplastic binder, e.g., polyolefins (col 4 line 60 col 5 line 6). It would have been obvious to have selected polyethylene (either LDPE or HDPE) as a suitable polyolefinic binder because these materials are widely recognized as polyolefins, they are cheap, and readily available. Furthermore, the softening point of these material is lower than that of the silica gel. As for the requirement that the melting index of the binder be "low," it appears from the

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www.knovel.com reference that the MFI of HDPE – ranging from 0.001 – 500 g/10 min – is indeed “low.” Table 1 describes weight percent binder as high as 30, thereby setting the sorbent wt.-% at about 70% (within the recited range).

Claim 29 is rejected under 35 U.S.C. §103(a) over co-applicant Ehud Levy's earlier-filed patent application 09/772542 (filed 1/30/01) in view of the publication under 35 USC 122(b) of later-filed patent application 09/854010 (filed 5/11/2001)(now Pub. No. US 2001/0042719 A1) (published 11/22/01), further in view of Markell.

Notwithstanding the granting of Ehud Levy's request that US patent application 09/772542 not be published under §112(b),¹ US patent application 09/772542 was nevertheless published² “under” sec. 122(b) because the entire contents of appln. '542 was incorporated by reference by co-applicant Levy in appln. '010. Appln. '010 was clearly publish under §122(b). Ehud Levy qualifies as “another” under §102(e)(1) because Ehud Levy is a different inventive entity that co-applicants Leby, Barranco, and Tazi in this application. The '542 application was filed before “the [presumed date of] invention” of the subject matter at issue here insofar as Levy, Barranco, and Tazi filed this application on 4/16/01 after the '542 application was filed the previous January 30. Accordingly, the 09/772542 application is prior art under §102(e)(1).

¹ '542 has not printed as a stand-alone printed document.

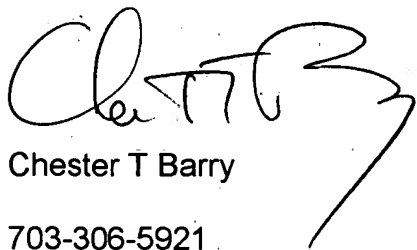
² Not only were the words of '542 “there” in the Levy Pub. No. US 2001/0042719 A1 by virtue of the incorporation by reference, but the contents of the '542 application was laid open for public inspection as of 11/22/01 by dint of Levy's having claimed the benefit of the earlier-filed '542 application under §120. Accordingly, '542 was “published” either way and only through the operation of the §122(b) publication of the '010 application.

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Appln. '542 describes zirconia particles 5 – 100 μm in size (page 6) in combination with an organic resin binder. The zirconia can constitute 25% of the total mass of the composition. The identity of the preferred organic resin binder is not apparent from the '542 application itself. It would have been obvious to have selected a HDPE polyethylene binder, however, in view of Markell and the reasons set forth above.

Claim 29 is rejected under 35 U.S.C. §112(1) for failing to particularly point out and distinctly claim the subject matter for which patent protection is sought. To teach how to make "zero melting index," i.e., "0 melt flow index, or MFI," HDPE. While HDPE having a MFU as low as 0.001 g/10 min has been reported,³ a HDPE having *no* tendency to flow is incredible.

The specification is objected to for failure to provide a MFU for LDPE at page 8, last sentence of last complete paragraph. Also, at page 13 line 5, "about 2-to about 10" appears where it would appear that "about 2 to about 10" was intended. Similarly, at page 13 penultimate line.

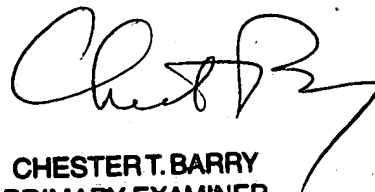


Chester T Barry

703-306-5921

9/29/02

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CHESTERT. BARRY
PRIMARY EXAMINER

³ Kissin, Y.V. Kirk Othmer Encyclopedia of Chemical Technology, vol 17 4th edn., Wiley Interscience, 1996, p.724 according to www.knovel.com at "polyolefins – Melt Flow Index." The encyclopedia article is not itself cited nor a copy provided. The examiner relies on the www.knovel.com pages.